

a heater disposed adjacent to said high-emissivity layer to form a clearance therebetween, the clearance being 0.1 mm or more, wherein:

said internal electrode has an emissivity less than [0.3] that of said high-emissivity layer; and

said high-emissivity layer has an emissivity of 0.3 or more, and a porosity more than 10 percent.

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1515 (Amended) An oxygen concentration detector comprising:

a sensor element including a solid electrolyte and external and internal electrodes provided on external and internal surfaces thereof, respectively;

a heater disposed at an inner side of said internal electrode to be adjacent to said internal electrode;

a first high-emissivity layer provided on a surface of said heater; and

a second high-emissivity layer provided on a surface of said internal electrode,

wherein:

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said internal electrode has an emissivity less than [0.3] that of said second high-emissivity layer;

each of said first high-emissivity layer and said second high-emissivity layer has an emissivity of 0.3 or more, and a porosity more than a predetermined value; and

said first high-emissivity layer is separated from said second high-emissivity layer to form a clearance therebetween, the clearance being 0.1 mm or more.